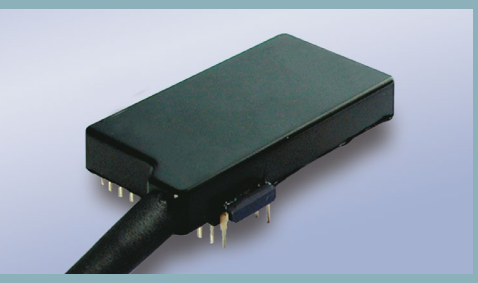
INSION®

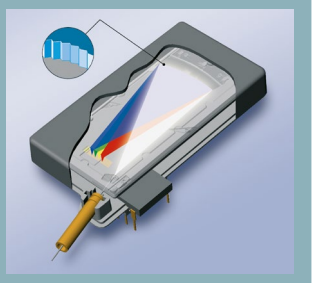
integrated spectral solutions

UV/VIS microspectrometer

Monolithic microspectrometer (OEM) for spectral sensing applications



UV/VIS-microspectrometer-Module



Basic spectrometer setup

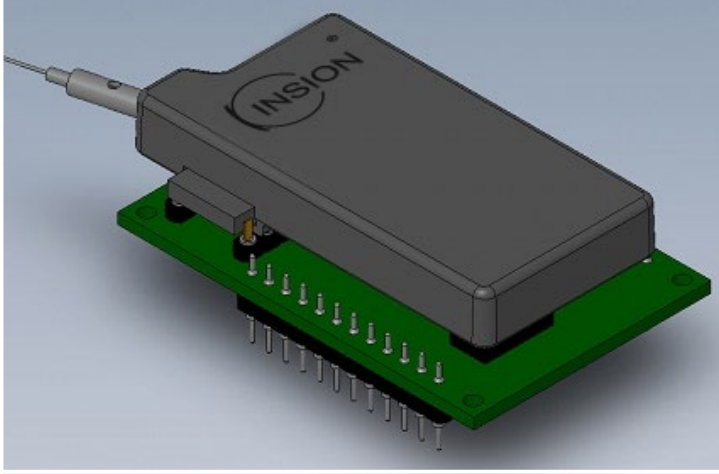
Product features:

- » no moving parts
- » excellent mechanical, optical and thermal stability
- » unsurpassed price / performance ratio
- » small dimensions
- » easy and flexible handling

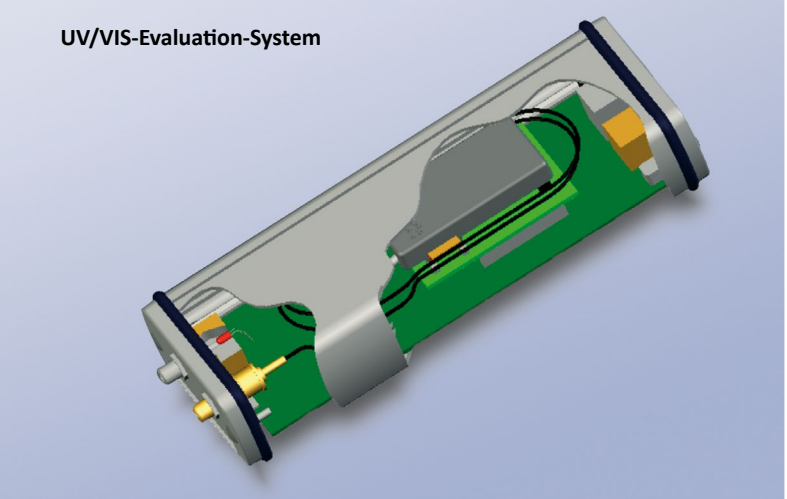
Excellent optical performance characteristics and inter instrument agreement due to a microinjection molded hollow cavity waveguide design. The use of a state-of-the-art photo detector facilitates the precise measurement in the UV/VIS range for hand held devices as well as for in-line process sensors.

Typical applications range from instrumental analysis, biological and clinical systems to colorimeters, food inspection systems and fluorescence measuring devices.

UV/VIS-microspectrometer-OEM-System



UV/VIS-Evaluation-System



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Technical Data | UV/VIS microspectrometer

Entrance Fiber	300/330µm; NA = 0,22
Entrance Slit	50µm x 300µm
Reproducibility	≤ 0,1nm
Spectral Range (specified)	350 - 850nm
Spectral Range in 1st diffr. order (accessible)	330 - 1050nm
Blaze Wavelength	420nm
Thermal Wavelength Stability	< 0,05nm/K
Dispersion	3,5nm/pixel
Spectral Resolution [$\Delta\lambda_{FWHM}$]	<10 (typ. 8,5)nm
Operating Temperature	0°C to +40°C
Storage Temperature	-40°C to +60°C
Peak Sensitivity at Wavelength	540nm
Sensitivity at 650nm (with 16 bit ADC)	> 65 (typ. 110) E12 cts x nm/Ws
Signal to Noise Ratio (with 16 bit ADC)	≥ 5000 at $T_{INTEGRATION}$=2ms
Detector Array	Hamamatsu S8378-256N24
Video Output Range [V]	0 to 2,4V

	Module	OEM-System	Evaluation-System
Dimensions (LxWxH)	54 x 32 x 9,5mm	67 x 36 x 22mm	165 x 60 x 36mm
Weight	50g	170g	500g
Fiber Length/Finishing	450mm; +50/-0mm; SMA*	450mm; +50/-0mm; SMA*	Fiberoptics can be connected via SMA
Interfaces	DIL22	UART / USB2.0	USB2.0
Accessories	Product Manual	Product Manual, Interface DLL	Product Manual, Power Supply, USB cable, TTL-trigger (alternatively on request: integrated miniature light source, 2500K), Software SPECview, Interface DLL, Housing
Power Requirements	5V; typ. 25mW	USB powered or 5V (+0,2V/-0V; ripple ±25mV)	Power Supply Egston MAINY or equivalent 9V/670mA (included)

Technical data may be changed without notice
State: March 2012
*Customizing on request

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